450 Sumac Road, Wheeling, IL 60090 · Tel (847) 537-9221 · Fax: (847) 537-9265 · www.setenv.com

# SITE SPECIFIC HEALTH AND SAFETY PLAN

# CITY OF ELGIN
# SALVAGE JEFFERSON YARD

# DRUMS, BULK SACKS, & CYLINDERS

# SURVEY, SAMPLING, STAGING, & SPILL CONTAINMENT

**July 13-14, 2009**

**Prepared For:**
**City of Elgin**
**Salvage Jefferson Yard**
**20 Jefferson Ave**
**Elgin, IL 60120**

**Prepared For:**
**Terracon**
**135 Ambassador Drive**
**Naperville, IL 60540**

**Prepared by:**
**SET ENVIRONMENTAL, INC.**
**450 Sumac Road**
**Wheeling, IL 60090**

# ii. TABLE OF CONTENTS



## ATTACHMENTS



## REFERENCES

# 1.0 Introduction.

SET Environmental Inc. (SET) was contacted on July 10, 2009 by Terracon Environmental to provide a team of field chemists, gas cylinder specialists, and technicians to address abandoned drums, bulk sacks, and cylinders at the City of Elgin – Salvage Jefferson Yard. It is believed that some of the materials are water-reactive metal powders, possibly magnesium. Furthermore, many if not most, of the containers are in poor condition for handling, sampling, and ultimate transport.

This Health and Safety Plan (HSP) is specific to continued field services to construct a temporary spill containment, move the palletized drums and bulk sacks, survey and sample each container, and address a chemical emergency resulting from the above stated procedures.

SET is a full service environmental remediation, emergency response, field services and transportation firm employing over 200 personnel throughout the United States. All SET field personnel are trained annually under OSHA 1910.120 Hazardous Waste Operations and Emergency Response. SET field supervisors are trained an additional 8 hours under 1910.120 and a minimal 24 hours under the direct supervision of an SET Project Manager. SET field personnel are also trained in Red Cross CPR/First Aid and Confined Space Entry and Rescue Procedures (29 CFR 1910.146(k) annually. SET truck operators retain training in DOT Hazardous Materials Transportation (49 CFR Part 172, Subpart H) requirements for transportation, documentation, labeling, and packaging of hazardous materials. SET employs a full Medical Surveillance program including baseline and annual physical, medical clearance, and respiratory clearance in accordance with OSHA standards. Training certification records and documentation is retained at SET Environmental Inc., 450 Sumac Road, Wheeling, Illinois and is available upon written request.

This Site Specific Health and Safety Plan (SSHP) has been developed by SET Environmental, Inc (SET) in an efffort to identify and control hazards associated with the City of Elgin – Salvage Jefferson Yard drums, bulk sacks, and cylinder survey, staging, sampling, and spill containment project. This SSHP is intended for the sole use of this project and shall not be applied by SET, subcontractors, nor clients towards any other project. This SSHP is not presented as the SET Environmental Inc. entire safety program. The purpose of the SSHP is to provide all employees at the site with the basic understanding of hazards presented whether physical, biological or chemical.This SSHP is written pursuant to the following:

OSHA 29 CFR1910.120 (Hazardous Waste Operations and Medical Surveillance)

OSHA 29 CFR 1926.65 (Hazardous Waste Operations and Medical Surveillance)

OSHA CFR 1910.134 (Respiratory Protection)

OSHA CFR 1910.106 (Spill Containment)

DOT 49 CFR 178 (Hazardous Materials Labeling, packaging and Transportation)

The SSHP is intended for the sole use of the specific job task hazards presented at this site. If a new task or hazard is introduced to the job site this document shall be reviewed and revised as necessarry for it to continually be effective. Changes to all or any part of this document must be approved by the SET Project Manager (PM) or SET Field Supervisor (FS) assigned to this project.

# 2.0 Key Personnel and Responsibilties.

**All SET employees, subcontractor employees and, visitors are responsible for continuous adherence to this SSHP**. No personnel may enter the exclusion zone area until they have read, understand and sign the SSHP. No person will be allowed to work in a manner that conflicts with the intent of, or the inherent safety and environmental precautions expressed within this document. Any employee, subcontractor employee, or visitor acting in a negligent manner in respect to these guidelines will be dismissed from the site. SET employees are subject to additional discipline including dismissal. The following table summarizes on site personnel and their responsiblities at the site.

**Table 2.1: On Site Personnel and Responsibilities**

| NAME | TITLE | RESPONSIBILITIES |
|---|---|---|
| John P. San Nicolas, CHMM<br><br>To be determined | SET Project Safety Coordinator<br><br>City of Elgin Safety Contact | Develop SSHP<br>Analyze hazards, hazard controls and PPE selection |
| John P. San Nicolas CHMM<br><br>Justin Kowalski | SET Project Manager<br><br>SET Chemist Supervisor | Implementation of the SSHP and all City of Elgin safety and health guidelines<br>Continual adherence to the SSHP and all City of Elgin safety and health guidelines<br>Conduct monitoring or assign an individual for monitoring in accordance with the SSHP |
| SET Environmental Personnel | Field Chemists, Technicians, & Truck Operators | Continual adherence to the SSHP and all City of Elgin safety and health guidelines |

In addition all SET employees, subcontractor employees, and visitors are expected to conduct themselves in a safe manner. This includes no horse play, recognition of inherent dangers or hazards, and performing tasks and duties using proper methods. SET employess, subcontractor employees, and visitors are expected to report any violation to the immediate supervisor.

# 3.0 Scope of Work

SET field activities shall consist of the following:

1. Jobsite walk-down with the City of Elgin is to initially delineate a complete work area including the initial location(s) of all the containers, the route the containers will be moved, the final staging and sampling location(s), and the quickest and safest evacuation route. The complete work area must be an Exclusion Zone to protect the safety of other workers in the vicinity and the public.
2. Assign specific tasks to the individual members of the SET crew to ensure all aspects of the project are addressed and a chain of command is established.
3. Conduct daily health and safety meeting, job hazard analysis, and daily job scope as a group. Contact the Elgin Fire Department to inform of daily job scope.
4. Position safety equipment at every reasonable interval to ensure quick response in the event of a chemical or medical emergency. Safety equipment includes both type A,B,C and type D fire extinguishers, skidsteer with sand piles, first aid kits, portable safety shower/eyewash, and cell phones. Ensure cell phone reception is good in the vicinity. Otherwise locate the nearest landline phone.
5. Address weather concerns and the potential water reactivity of materials such as magnesium powder. In the event of a rain forecast, the complete work area must be under a roof or consider the postponement of the project.
6. Construct the containment around the initial location of the containers per the SET Phase I action plan. This is to include putting oil dry and absorbent boom on the ground around the palletized drums and bulk sacks.
7. Construct the containment to be used for the temporary staging, survey, and sampling of the drums, bulk sacks, and cylinders. Ensure that enough room is given to allow for segregation of incompatible materials, i.e. acid from bases, oxidizers from organic materials, water-reactive materials from aqueous solutions, and cyanides from acids.
8. A SET Field Chemist in level C PPE with full face respirator and out Kevlar turnout gear will assess each container for integrity and content before the container is moved. If the material is suspected to be a water-reactive material such as magnesium, a field oil test will be conducted to confirm non-reactivity.
9. A telescopic forklift will be used to move the palletized container from the multi-tiered stack to the new staging, survey, and sampling spill containment.
10. A complete container/contents survey and sampling will be conducted to address future concerns of transportation and disposal including over-packing necessity and segregation.

# 4.0 Activity Hazard Evaluation

It is the major intent of SET environmental to remove employees and subcontractor employees from the source of a hazard by using appropriate engineering controls and methods. Because of the scope of work involved within this project SET must utilize administrative and PPE controls to perform several tasks within this project. The Activity Hazard Evaluation has been developed to identify potential health, safety and environmental hazards and provide for the protection of site personnel, the community, and the environment. The purpose of developing the Hazard Evaluation is to identify hazards and precautionary measures in a step by step sequence called control measures.

### 4.1 Chemical Hazards.

Due to the mostly unknown contents of the containers, SET must be cognizant and prepare for all major chemical emergencies and reactions. This range of chemicals from which an emergency may arise includes explosives, shock sensitive materials, flammable and non-flammable pressurized gases, flammable liquids, flammable solids, spontaneously combustibles, water-reactives, oxidizers, organic peroxides, toxic materials, and corrosives.

With respect to magnesium powder, SET will sample suspect metal powders and conduct a field oil test to confirm non-reactivity. If suspected water-reactive, the top of the drum will be filled with mineral oil to protect the dust from going airborne and to protect from moisture. In addition, the drum will be covered with plastic and braced to the pallet with two ratchet straps. Finally, the palletized drum will be place in the staging area using a telescopic forklift.

### 4.2 Physical Hazards.

Physical hazards and control measures expected to be encountered on site are summarized in table 4.2.

### 4.3 Biological Hazards

The site is restricted access, located outside, and due to the season biological hazards are expected to be minimally present during normal site activities including wild animals, insects and foliage.

**Table 4.2: Physical Hazards and Controls**

| Activity | Hazard | Control Measure |
|---|---|---|
| All | Contingency Planning | • Post necessary permits, emergency numbers, hospital route<br>• Conduct daily tail-gate safety meeting and sign off sheet<br>• Complete emergency equipment location map and place in Attachments. Post one copy at site |
| Physical | Physical-Topography (slips trips, falls) | • Visually inspect the surroundings. Mark or fill areas of concern including holes, depressions, sinks, etc.<br>• Clear the area of unwanted debris including pathways, staging areas, etc.<br>• Continue good housekeeping throughout project.<br>• Designate areas for decontamination, staging and support. Maintain and keep proper equipment in each zone. |
| Physical | Personnel Injuries | • Verify hand signals are understood and all rescue equipment is on site and in working order<br>• Discuss and Familiarize the City of Elgin Emergency system and reporting requirements<br>• Administer first aid as necessary |
| Physical | Traffic Control | • Use Barriers, cones, sawhorses and/or caution tape to isolate the work area and equipment from oncoming traffic and pedestrian control. |
| Physical | Explosion | • Ground all equipment used in or around the work area (i.e. skidsteer, forklift)<br>• Continuous air monitoring.<br>• Lower Explosive Limits (LEL) must be less than 5% prior to staging, survey, and sampling. |
| Physical | Hand Tools | • Visually inspect all tools for durability and integrity. Dispose of damaged tools.<br>• Use tools only designed for the specific purpose. |
| Physical | Ladders | • Keep clean and free of slippery sludge/debris.<br>• Use 4:1 slope ladder rule.<br>• Employee must keep three points of contact on ladder.<br>• 2nd worker must hold bottom of ladder during climbing. |
| Physical | Spills or Release | • Contain the area immediately follow clean up and safety procedures outlined in the MSDS AND NIOSH HANDBOOK TO CHEMICAL HAZARDS<br>• Evacuate if necessary, notify City of Elgin and appropriate authorities<br>• Construct bermed containment to contain the largest amount of any one container if the container should leak. |
| Physical | Pinch Points | • Eliminate all pinch points by guarding and /or proper work techniques.<br>• Wear pinch resistant work gloves under chemical gloves |
| Physical | Electrical and Kinetic Energy | • Full SET lockout/tag-out procedure.<br>• Follow City of Elgin site representative's direction. |
| Physical | Electrical | • GFCI at the **SOURCE** outlet of all extension cords or direct power equipment.<br>• All power equipment and extension cords must have an intact grounding wire and plug.<br>• Worn, frayed, damaged or cut extension cords shall be cut apart and disposed of. |
| Physical | Lifting | • Perform Team lifting for loads over 50 pounds. |
| Physical | Heavy Equipment | • Create good communication with forklift and skidsteer operator(s).<br>• Review hand signals and wear high visibility safety vests.<br>• Delineate work zone(s) for heavy equipment. |

In addition to the task specific hazards all SET employees, subcontractor employees and visitors are expected adhere to and observe the following rules

1.) No smoking, eating, drinking, or chewing tobacco in the work area. Smoking is only permitted in City of Elgin's designated smoking areas.
2.) Notify the immediate supervisor or project manager of any discrepancies, problems, or hazards encountered on the job site.
3.) An employee is not expected to enter **any** hazardous area unless provided the equipment and data presented within this report and job site results. No employee shall be forced into a hazardous environment if the criteria have not been met. A supervisor, project manager or client forcing an individual into a hazardous environment without first obtaining the necessary criteria shall be subject to disciplinary and possible legal action.

# 5.0 Personal Protective Equipment.

The Personal Protective Equipment (PPE) has been chosen for this job site according to the site characterization and analysis, job tasks, site hazards, intended use and duration of potential worker exposure. During site operations changing conditions may require the adjustment in the level of protection. The following levels of protection will be made available at all times during the project work. Only the Project Manager, or Site Safety Officer can change or alter these levels.

**Table 5.1: Levels of Protection**

| LEVEL | COMPONENTS |
|---|---|
| B | Full face supplied air respirators (air line)<br>One piece Innet chemical coveralls with elastic hoods, wrists, and ankles ( Saranex)<br>Outer Hustler Gloves, Inner Nitrile Gloves<br>Steel toed Hazmat chemical boots with a PVC boot cover over it.<br>Outer Kevlar turnout gear<br>Hard Hat |
| C | Full Face air purifying respirator w/ organic vapor acid gas cartridges<br>Inner One Piece chemical overalls (Saranax)<br>Outer Kevlar Turnout gear<br>Outer Chemaster Gloves with Inner Nitrile gloves<br>Steel Toe boots w/ PVC coating or heavy pullover latex booties<br>Hard Hat |
| D+ | One Piece chemical overall- FRC rated<br>Inner Nitrile Gloves with outer leather gloves<br>Hard hat with safety glasses or goggles<br>Steel Toe boots w/ PVC coating or heavy pullover latex booties<br>High Visibility Reflective Safety Vest |
| D | Fire Retardant Protective Coveralls<br>Safety Glasses or Goggles<br>Hard Hat<br>Steel Toe Shoes<br>Heavy Duty Leather Worker Gloves as necessary<br>High Visibility Reflective Safety Vest |

***Note: Equipment levels will be changed according to the type of work on site and the atmospheric conditions present. Respiratory protection may be changed based upon consecutive monitoring results.***

The following table exhibits the protection task specific PPE selection for each hazard expected to be encountered on this site.

**Table 5.2:Task Specific PPE Selection**

| TASK | PPE |
|---|---|
| A). Mobilization, containments set-up | Level D<br>Hearing Protection as necessary |
| B). Initial container survey prior to re-staging. | Level C<br>Hearing Protection as necessary |
| C). Container re-staging | Level C<br>Hearing Protection as necessary |
| D). Complete container survey and sampling | Level C<br>Hearing Protection as necessary |
| E). Demobilization | Level D |

# 6.0. SITE SECURITY AND CONTROL

### 6.1 Contamination Control Zones

The Project Manager or Foreman shall establish contamination control zones for the project based on the location of contamination, wind direction and other conditions specific to the site. These zones must be clearly identified and protected against unauthorized entry.

a.) Exclusion Zone:
The exclusion zone (EZ) is the area where the containers are located initially, the route they will be moved, and the final staging and sampling containment. This zone has the highest potential for exposure to the chemicals**. The exclusion zone will be bordered at the point of entry to the defined work area (caution taped and barricades).**

b.) Contamination Reduction Zone:
The contamination reduction zone (CRZ) is established at the entry and exit of the EZ. Decontamination takes place in this zone: ppe, disposal drums and decon assembly must be established at this point**. The CRZ is the immediate area outside the point of entry to the defined work area. The CRZ is also the location of where all vessel(s) shall be filled with waste.**

c.) Support Zone:
The support zone is established in the uncontaminated areas and is to be used for the storage of supplies and general administrative functions. **Support zones include the trucks and equipment trailers.**

### 6.2 GENERAL SITE SECURITY

At the prejob safety meeting SET and subcontractors will be instructed on the route to travel to the work area. All SET and subcontractors must sign in daily. All SET employees and subcontractor employees shall proceed directly to the work zone. Any employee or subcontractor employee caught "wandering" from the site shall be dismissed and subject to additional disciplinary action. All SET employees must sign out at the end of each work day.

No pictures are allowed on site without the permission of the City of Elgin.

SET shall provide means of securing all equipment and vehicles at the end of each work day or remove them off-site.

**6.3 DAILY ACTIVITY**

In addition to the control zones presented above all employees are expected to perform the following at the end of each work day.

All drums and bulk sacks shall be covered, tarped and/or sealed. The container log in the attachments section shall be completed for all material left on site. All drums, bulk sacks, or cylinders shall be appropriately labeled including a unique identification number. Drums, bulk sacks, and cylinders shall remain in a bermed containment surrounded by caution taped.

Any equipment coming into contact with the exclusion zone shall be placed in a dedicated berm and covered or bagged in 6-mil poly until decontamination or project completion. The Entire work zone shall be taped off and secured with traffic barriers, cones and/or caution tape.

**6.4 DECONTAMINATION**

Because of the nature of activities under this work order, decontamination of equipment and personnel will be necessary. The general guidelines for decontamination are listed below.

a.) Equipment Decontamination

All tools and equipment used during site activities and coming in contact with contaminated media must be cleaned before removing from site. Equipment cleaning shall consist of a thorough washing of equipment contacting impacted media. Rinsate shall be collected into dedicated disposal drums. Dedicated equipment is to remain within the exclusion zone or in appropriate bermed structures, shielded from weather elements.

b.) PPE decontamination

Before any personnel may leave the site they must follow the decon procedures below:

1. Remove outer boots or booties, protective garments and equipment in the CRZ. All disposable clothing must be removed and placed in lined drums and appropriately labeled.
2. Reusable clothing or equipment must be either cleaned or bagged and returned to the shop for decon.
3. Remove respirator after contaminated outer wear has been removed.
4. Dispose of respirator cartridges or disposable respirators in lined, appropriately labeled drums (as described above).
5. Clean respirator and thoroughly wash hands and face before eating or drinking

d.) Sanitation

All SET employees and subcontractor employees must fully decontaminate before using any available facilities

# 7.0 RCRA CONTIGENCY PLAN

**For any incident involving medical attention, spills, release, fire, or explosion the following steps shall be performed:**

- **Dial _____ from cell phone located within each SET vehicle**
- **Report Your location**

**City of Elgin**
**Salvage Jefferson Yard**
**20 Jefferson Avenue**
**Elgin, IL 60120**

## 7.1 ALARMS AND SIRENS

For response to incidents the following alarms are employed:

### SET Alarm System

The SET alarm consists of three short blasts from a sound horn. SET personnel shall perform the following.

Proceed to designated evacuation area
Establish head count.
Address the emergency
Notify City of Elgin authorities for further attention.

### City of Elgin Alarm System

In the event of a City of Elgin emergency alarm signal perform the following:

Shut-off vehicles and stop work; evacuate the work area.
Proceed to the City of Elgin designated evacuation area
Perform head count
Report any missing personnel to the appropriate authority.
Under direction of City of Elgin, return to the yard main entrance.
Clear the road(s) and yield right-of way if necessary

Wait until all clear siren.

## 7.2 MEDICAL EMERGENCIES

In the event of a medical emergency, SET shall perform the following actions. The route and phone number to the hospital is in Appendix B.

**Minor Injury Not Requiring Medical Attention (abrasion, minor laceration, etc):**

Administer First Aid

Take to hospital or physician if injury persists.

Notify City of Elgin immediately.

Supervisor shall complete a City of Elgin accident investigation form(s) if applicable and the SET internal investigation form(s)

**Chemical Skin, Eye, Inhalation, or Ingestion Exposure**

Remove from source of exposure, decontaminate if necessary

Consult MSDS AND NIOSH HANDBOOK TO CHEMICAL HAZARDS

Administer First Aid according to MSDS AND NIOSH HANDBOOK TO CHEMICAL HAZARDS instructions

Notify City of Elgin, forward applicable MSDS AND NIOSH HANDBOOK TO CHEMICAL HAZARDS Sheets immediately.

Supervisor shall complete the City of Elgin accident investigation form(s) if applicable and the SET internal investigation form(s)

**Major Injury involving immediate medical attention**

**DO Not** remove injured personnel if suspected injury consists of a broken bone, injured back etc.

Dial 911 and give your location.

Contact City of Elgin on-site contact.

Supervisor shall complete the City of Elgin accident investigation form(s) if applicable and the SET internal investigation form(s)

**Injury to five or more personnel or injury involving death**

Follow the above

Report to OSHA within 48 hours

In addition to the previous steps all supervisors are required to report any injury to the City of Elgin and SET Environmental, Inc. SET will perform a full site investigation and report findings directly to the City of Elgin. SET maintains an annual OSHA 300 log and shall make all recordable and non-recordable incidents available for the City of Elgin's review.

All personnel administering first aid shall use the outlines provided in the Bloodborne Pathogens SOP

### 7.3 FIRE or EXPLOSION

As outlined in the Activity Hazard Analysis and Control section, it is SET Environmental's intent to take all precautions to minimize the event of Fire and Explosion. In the event of fire or explosion at the City of Elgin – Salvage Jefferson Yard, SET will perform the following response actions

**Small Fire in "non-hazardous" area.**

Notify City of Elgin
Extinguish Fire
Report to City of Elgin
Retain fire watch on site for 6 hours.
Fill out SET Incident Report Form and City of Elgin investigation forms. Forward copies to City of Elgin.

**Large Fire, explosion fire in "hazardous material location"**

Evacuate Area Immediately
Notify as above
Follow City of Elgin procedures

### 7.4 EVACUATION ROUTE

The evacuation route and meeting areas shall be established by the City of Elgin Site Representative. The map in the ATTACHMENTS shall be completed, reviewed with all site employees, and posted on site.

## 8.0 Waste Disposal

All wastes placed into drums, roll-off boxes, or other containers will be properly profiled, labeled, placarded, manifested, and disposed. During the phase I survey, staging, sampling, and spill containment, it is expected that only PPE related materials are generated for disposal. Further activities may result in additional wastes generated.

# 9.0 SPILL AND LEAKS

The Spill Contingency Plan is developed by SET as a preventative measure and response for the release of controlled substances. The following table are basic rules to be adhered in order to **PREVENT** spills and release during site activities at the City of Elgin – Salvage Jefferson Yard facility.

| | |
|---|---|
| **Drums or Portable Tanks** | • Label all drums and portable tanks on site<br>• Drums or portable tanks must be bermed or contained in a secondary spill reservoir capable of containing the largest capacity of any single item.<br>• Segregate drum(s), or portable tanks which have the potential to exhibit violent chemical reactions with each other.<br>• No drums or portable tanks exhibiting poor structural integrity, visible damage, nor non conformance with applicable DOT standards shall be allowed on site.<br>• Continued drum log for both imported materials and site refuse shall be maintained daily and maintained on site.<br>• Keep heavy equipment, sharp tools and other sources of puncture away from the dedicated staging area. |
| **Portable Fuel tanks** | • All fuel tanks stationed on site must be appropriately labeled |

**In the event a spill or leak shall occur the following measures shall be taken:**

1). Only trained personnel shall be allowed to remain on the site or proximity.

2). Use appropriate PPE and attempt to contain the spill.

3). Follow Procedures outlined in section 7.

If a drum or other container shall exhibit a slow leak, poor integrity, or otherwise be punctured it shall be transferred into another container immediately.

All material resulting in spills shall be staged or disposed of under the guidelines referenced in section 8.

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# ATTACHMENT A
# CHEMICAL INFORMATION

| Magnesium | CAS 7439-95-4 |
|---|---|
| *Mg* | RTECS OM2100000 |
| **Synonyms & Trade Names**<br>Magnesium metal, powder, 100 m | **DOT ID & Guide**<br>UN2950: ERG # 138<br>UN1869: ERG # 138<br>UN1418: ERG # 138 |

| | |
|---|---|
| *Exposure Limits* | **NIOSH REL**: TWA 1 mg/m$^3$ |
| | **OSHA PEL**: TWA 1 mg/m$^3$ |
| **IDLH** | **Conversion** |

**Physical Description**

Silver-white, odorless, solid metallic powder

| | | | |
|---|---|---|---|
| MW: 24.31 g/mole | BP: 2012 F | FRZ: solid at room temp. | Sol: soluble in acid, insoluble water |
| VP: n/a | IP: | | Sp.Gr: 1.74 (water = 1) |
| Fl.P: NA | UEL: NA | LEL: NA | |

Highly flammable solid in the presence of open flame or spark. Flammable in the presence of moisture or acids

**Incompatibilities & Reactives**

Reacts with oxidizing agents, acids, and moisture

**Measurement Methods**

| Personal Protection & Sanitation | First Aid |
|---|---|
| (See protection)<br>Skin: Prevent skin contact<br>Eyes: Prevent eye contact<br>Remove: When wet or contaminated<br>Change: No recommendation<br>Provide: Eyewash (>1%), Quick drench (>1%) | (See procedures)<br>Eye: Irrigate immediately<br>Skin: Water flush immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |

**Respirator Recommendations**

NIOSH/OSHA
**Up to 15 mg/m$^3$**:
(APF = 25) Any supplied-air respirator operated in a continuous-flow mode£
(APF = 25) Any powered, air-purifying respirator with acid gas cartridge(s) in combination with a high-efficiency particulate filter£

(APF = 50) Any chemical cartridge respirator with a full face piece and acid gas cartridge(s) in combination with an N100, R100, or P10 filter. Click here for information on selection of N, R, or P filters.
(APF = 50) Any air-purifying, full-face piece respirator (gas mask) with a chin-style, front- or back-mounted acid gas canister having an N100, R100, or P100 filter. Click here for information on selection of N, R, or P filters.
(APF = 50) Any self-contained breathing apparatus with a full face piece
(APF = 50) Any supplied-air respirator with a full face piece
**Emergency or planned entry into unknown concentrations or IDLH conditions**:
(APF = 10,000) Any self-contained breathing apparatus that has a full face piece and is operated in a pressure-demand or other positiv pressure mode
(APF = 10,000) Any supplied-air respirator that has a full face piece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus
**Escape**:

(APF = 50) Any air-purifying, full-face piece respirator (gas mask) with a chin-style, front- or back-mounted acid gas canister having an N100, R100, or P100 filter. Click here for information on selection of N, R, or P filters./Any appropriate escape-type, self-contained breathing apparatus
Important additional information about respirator selection

## Exposure Routes

inhalation, ingestion, skin and eye contact

## Symptoms

Magnesium dust can cause skin and eye irritation by mechanical action. Spicules may penetrate wounds and retard healing. Magnesiu dust can cause respiratory tract (nose, throat, lung) irritation. Symptoms may include coughing, wheezing, nasopharyngitis, and/or shortness of breath. When Magnesium metal is heated during welding or smelting process, Metal Fume Fever may result from inhalatio of magnesium fumes . Metal Fume Fever is a flu-like condition consisting of fever, chills, sweating, aches, pains, cough, weakness, headache, nausea, vomiting, and breathing difficulty. Other symptoms may include metallic taste, increased white blood cell count. The is no permanent ill-effect.

## Target Organs

Eyes, skin, respiratory system.

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# ATTACHMENT B

## SET MSDS

*(Provided under separate cover)*

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# ATTACHMENT C
# ROUTE TO NEAREST HOSPITAL

*Sherman Hospital*
*934 Center Street*
*Elgin, IL 60120*
*(847) 742-9800*

| | | |
|---|---|---|
| *1)* | *Start out Going EAST on JEFFERSON AVE towards N GROVE AVE* | *0.3 mi* |
| *2)* | *Turn LEFT onto N SPRING ST* | *0.4 mi* |
| *3)* | *Turn RIGHT onto SLADE AVE* | *0.1 mi* |
| *4)* | *Turn LEFT onto CENTER ST* | *0.1 mi* |
| *5)* | *END at 934 Center St. Elgin, IL 60120* | |

*Estimated Time: 2 minutes* *Estimated Distance: 0.77 miles*

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# ATTACHMENT D

# EMERGENCY CONTACTS AND PHONE NUMBERS

450 Sumac Road, Wheeling, IL 60090 · Tel (847) 537-9221 · Fax: (847) 537-9265 · www.setenv.com

# ATTACHMENT D:
# EMERGENCY CONTACTS AND PHONE NUMBERS
(Additional Copy to be Posted at Site)

**EMERGENCY NUMBERS**:

| | |
|---|---|
| 24 Hour Emergency | 877-437-7455 |
| Poison Control | 217-782-6760 |
| In Facility Emergency<br>TBD | |
| Fire and Ambulance (Facility)<br>Police, Fire, Ambulance (External) | TBD<br>TBD |
| Security (gate) | TBD |
| Utilities (electric) | TBD |
| Utilities (gas) | TBD |
| Utilities (water) | TBD |
| Utilities (phone) | TBD |
| Julie | 800-892-0123 |
| Chemtrec | 800-424-9300 |

**SITE CONTACT NUMBERS**

| | |
|---|---|
| SET Environmental | 847-537-9221<br>Fax 847-537-9265 |
| SET Project Manager<br>John P. San Nicolas | 708-606-6680 |
| SET Site Supervisor | TBD |
| City of Elgin Safety & Security | TBD |
| City of Elgin Job Representative<br><br>Terracon Representatives<br>Mark Wilson<br>John Nardozzi | TBD<br><br><br>630-770-9538<br>630-330-3034 |
| Steve Pavolich, CHMM<br>SET Health and Safety Director | 847-537-9221 |

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# ATTACHMENT E

# EQUIPMENT AND FACILITY LOCATION MAP

(To be Completed and Posted at site)

# ATTACHMENT E
# EQUIPMENT AND FACILITY LOCATION MAP
(To be Completed and Posted at site)

## F.1. Emergency Equipment Locations

20 lb ABC Fire Extinguishers (1-Inside each SET Vehicle, 1-Inside control zone)
20 lb Type D Fire Extinguishers (3-Inside control zone)

First Aid Kits (1-InsideSET Vehicle)
Eye Wash Stations (1-Inside SET Vehicle, 1-Inside control zone)
Emergency Sound Horns (1-InsideSET Vehicle, 1-Inside control zone)

## F.2 Facility Location

Washroom (F1)
Drinking Water (F2)
Break Area (F3)
Phones (F4)

## F.3 Evacuation Route and Meeting Area

Evacuation Route (X1)
Meeting Area (X2)

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# SET REFERENCES

# I. SET CONFINED SPACE PERMIT ENTRY SOP

## 1.0 Introduction

SET Environmental, Inc. (SET) is firmly committed to providing each of its employees a safe and healthy work environment. Personnel who are involved in confined space operations face special dangers such as toxic, explosive or asphyxiating atmospheres or engulfment. To protect our employees the company has established a written Confined Space Entry Program that establishes guidelines for those who work within confined spaces.

The written Confined Space Entry Program contains the details of the entry permit system, classification of confined spaces, regular and alternate procedures for personnel involved in confined space entry and evaluation, and the definitions of terms relating to permit space operations.

The following sets forth the basic rules established for SET Environmental personnel working at the Midwest Generation, LLC site. The written Confined Space Entry Program in its entirety is available to employees, clients, and authorized representatives upon request. The Permit Required Confined Space Program is written in accordance with OSHA 29 CFR 1910.146 and 1926.21

## 2.0 General Rules and Guidelines

- Every confined space in the workplace shall be evaluated to determine if it is a confined space prior to entering.
- A Confined Space Evaluation Form (following) shall be completed for every permit required confined space and placed in this appendix.
- A sign reading “Danger-Permit Required Confined Space. Do Not Enter” shall be posted at all entrances to the confined space area(s).
- Regular confined space entry procedures shall be followed for permit spaces that exhibit multiple hazards.
- The permit in this appendix shall be completed prior to entry of any confined space. This permit is valid for a maximum of 12 hours. The Confined Space Evaluation Form may assist in completion of this permit.
- Continuous monitoring is required for oxygen, explosive atmospheres, carbon monoxide, combustible gases and vapors, toxic gases and vapors, specific contaminants of concern, and all other hazards whether physical, biological or chemical.
- Each employee serving as authorized attendant, entrant, or supervisor shall be trained in the following
    - Permit system operation.
    - Their specific duties
    - The hazards encountered
    - The proper use of the equipment
    - Forms of communication
    - Conditions for evacuation
    - Procedures for summoning rescuers
    - Procedures for non-entry rescue
    - Each rescue entrant shall be trained in the following**:**
    - The proper use of PPE and rescue equipment
    - The specific duties required for rescue personnel
    - Basic first-aid including cardiopulmonary resuscitation (CPR)
- Two attendants must remain outside the confined space for each entrant.
- At least one member of the rescue service must have certification in first aid and CPR.

- Each rescue entrant shall use a chest or full body harness, with a retrieval line attached at the center of the entrant's back, or above the entrant's head. Wristlets may be used if the harness poses a greater hazard and wristlets are the safest alternative. The retrieval line shall be attached to a mechanical device or fixed point outside the permit space. A mechanical device shall be available to retrieve personnel from vertical permit spaces more than 5 feet deep.
- All equipment shall be available on site, inspected and readily arranged prior to any entrance of a confined space.
- All permits shall be retained on site until the job is completed, and made readily available for inspection.
- All permits shall be retained in this SSHP for a period of three years. Additional time considerations under OSHA may be encountered pending the duration and types of exposures.
- Each permit shall be invalidated for the following reasons
- At the end of the work shift (max 12 hours)
- When the task is completed
- When additional hazards are introduced
- Rescue equipment, monitoring devices, proper PPE, or other equipment is defective, not readily available, or depleted.
- The confined space is evacuated and unattended for any duration.No confined space work is expected to occur during the duration of this project.

# II. SET LOCKOUT/TAGOUT SOP

In accordance with OSHA 1910.147 SET has developed Standard Operating Procedures to protect against the use and control of hazardous energy. The following are basic rules that apply when employees may be exposed to electrical hazards from the servicing or maintenance of machines or equipment.

**Placement**

- Lockout or Tagout devices shall be affixed to each energy device by authorized employees ONLY!
- Lockout/tag-out devices shall clearly display the assigned person, company, and a contact phone number.
- Lockout devices shall be affixed to hold the energy supply in the off position.
- Tagout devices shall be affixed where the movement from the off position clearly indicates is prohibited. This is commonly the position where lockouts would be used.
- If a tag cannot be affixed directly to the desired position it shall be affixed as closely safely possible to the device so that it is immediately obvious to anyone attempting to operate the device.
- Following the application of lockout/tag-out all hazardous potential or stored energy shall be relieved, disconnected, discharged, or restrained. If there is a potential for re-accumulation of stored energy this method shall be continuous.
- Prior to beginning work the authorized employee shall verify that isolation end de-energization of the machine has been successfully accomplished. (LOCKOUT/TAGOUT/TRYOUT)

**Removal**

- After lockout/tag-out devices have been removed and before equipment start up affected employees shall be notified that the locks/tags have been removed.
- Each Lockout/tag-out device shall be removed from each energy device by the employee who applied it. The Exceptions are:
  - Verification that the employee is no longer at the facility.
  - Making all reasonable efforts to contact the employee.
  - Ensuring that the employee has knowledge before he/she resumes work at the facility

**Contractor Lockout/Tagout**

- SET personnel working at an outside facility, and the on site employer shall respectively inform each other of their lockout/tag-out procedures.
- The on-site employer is responsible for ensuring his/her employees understand and comply with the restrictions and prohibitions of the SET lockout/tag-out SOP.

**Group lockout/tag-out**

- Primary responsibility is assigned to an employee who is responsible for a group lockout tag-out device (such as an operations lock).
- When more than one crew, craft, trade or department is involved responsibility of coordination shall be assigned to an authorized employee to coordinate affected work forces and ensure continuity of protection
- Each authorized employee shall affix a personal lockout/tag-out to the group lockout when beginning work and remove the devices upon completion of work or work stoppage.
- During shift or personnel changes specific procedures shall be established for oncoming and off-going employees for the continuous protection of lockout/tag-out protection.

## SET LOCKOUT PROCEDURE:

Obtain lock out points directly from the contact or client.

Affix the labeled SET general locks from the lock box to all energy sources involved in the scope of work.

Place all the general lock keys back within the SET "Lock Box".

Apply the HASP to the lock Box.

The shift supervisor and all affected employees shall apply their personal lock to the hasp upon the lock box.

Upon completion the supervisor and affected employees shall remove their locks from the lock box and remove the keys to take off the locks

# III. SET WRITTEN RESPIRATORY PROGRAM

## 1.0 Introduction

SET Environmental, Inc. (SET) has established and implemented a Written Respiratory Protection Program in accordance with OSHA 29 CFR 1910.134. The program in its entirety is available in the SET office and is available for review to employees, clients and authorized representatives upon request. The written Respiratory Protection Program contains the details of the training, respirator selection and administration, record-keeping, medical surveillance, maintenance, procedures, and fit testing. The program administrator for SET, Environmental is Michael Ortiz.

## 2.0 Basic Rules and Guidelines

- Only personnel who have been properly trained in the use and maintenance of respirators shall be allowed to don Air Purifying Respirators (APRs) or Supplied-Air Respirators (SARs).
- Only properly cleaned, maintained, NIOSH approved respirators shall be used on site.
- Only the SO or PM shall be allowed to make changes to the respirator selection. Appendix I of this document must be completed and submitted.
- Used APR cartridges must be discarded and replaced at the end of each shift
- Positive and negative fit tests must be performed each time respirators are donned.
- Only personnel who have been fit tested over the last 6 months will be allowed to don respirators.
- Personnel required to wear respirators must have been certified by a licensed Occupational Health Physician within the last 12 months.
- Contact lenses or glasses can not be worn with respirators. Only eye wear specifically designed for use with respirators may be used.
- All SAR Equipment must meet applicable ANSI standards
- Respirators shall be cleaned and sanitized after each days use
- Respirators shall be stored in a clean sanitary location at all times.
- Respirators shall be stored in a non contorting position at all times
- All SAR equipment shall be visually inspected at the shop, and prior to each use.
- Facial hair, which might interfere with the proper fit and seal of a respirator is strictly prohibited.
- All respirator replacement parts and cartridges must be of the same make and model. No modifications may be made.
- Any alterations of respiratory equipment for the use of smoking, eating, or chewing tobacco is strictly prohibited.

## 3.0 Site Specific Respiratory Protection

SET shall utilize Survivair Full Face respiratory protection with combination chemical/HEPA cartridges during cleaning procedures of the interior pit. Such protection is determined to have a protection factor of 50 under NIOSH guidelines. No respiratory protection may be downgraded unless a negative exposure assessment can be completed based upon air monitoring PID results.

# IV. SET BLOODBORNE PATHOGENS SOP

(amended for non-biological job-sites)

The bloodborne pathogen SOP has been developed by SET in accordance with OSHA 29 CFR 1910.1030 and OSHA 29 CFR 1910.120. Under these standards the following general guidelines must be employed if there is a potential exposure to human blood, tissue, or mucous membranes:

**Universal Precautions**

- Universal precautions is an approach to infection control. According to the concept of Universal Precautions all human blood and certain body fluids are treated as if to be known to be infectious for HIV, HBV, and other bloodborne pathogens.
- Body fluids included are blood, semen, vaginal secretions, cerebrospinal fluids, synovial fluid, pleural fluids (lungs), pericardial fluid (heart), peritoneal fluid, amniotic fluid, and saliva in dental procedures

**General Guidelines**

- For minor lacerations or first aid activities involving the body fluids mentioned above no SET employee shall administer first aid to another injured individual. Minor first aid treatment and administration shall be performed by the individual injured to himself/herself.
- Employees administering first aid shall be trained under Red Cross First aid treatment and shall maintain a current certificate.
- Any employee administering first aid under Universal Precautions shall use a “barrier” to prevent skin and mucous membrane exposure to infectious body fluids. Barriers include latex or vinyl gloves, masks, goggles, gowns or aprons.

- Gloves shall be worn for any contact with blood or infectious body fluids.
- Torn gloves shall be changed and a thorough hand washing shall occur before replacing them.
- Do not re-use gloves.
- All barrier material contaminated with bodily fluids shall be disposed of in a regulated container or red bag displaying the BIOHAZARD label. This waste must be disposed of in an approved landfill or treatment facility.
- Pocket masks for performing rescue breathing/CPR may be used. it is SET’s policy to appropriately dispose of these masks and not sanitize them for re-use.
- Hands and other skin surfaces shall be washed immediately and thoroughly if contaminated with blood or other body fluids. Soap and water or antiseptic hand cleanser shall be used.
- If needles or other “sharps” are encountered on a job site they should be immediately placed into puncture-resistant containers.
- Never re-cap, bend or break a needle by hand.
- Any surface or object that is contaminated with blood or infectious body fluids shall be cleaned promptly.
- Cleaning agents include household bleach mixed in a ration of 1cup bleach to one gallon of water.
- All rinsate, and cleaning materials must be placed into approved BIOHAZARD containers, or BIOHAZARD bags.
- Each employee who believes that there is a potential for exposure to the HBV virus is entitled to a vaccine during his or her annual physical.
- A declination form must be completed if the SET Employee refuses a Hepatitis B vaccination
- Medical records shall remain confidential to the physician and the employee.
- Any vehicle used to transport injured personnel shall be cleaned and disinfected according to the above guidelines
- OSHA required Bloodborne Pathogens Infection Protection Packs are required on-site for the duration of the project.

- Personnel who have come into contact with or may be exposed to bloodborne pathogens shall immediately report to the Project Supervisor and the Project Safety Coordinator. The Bloodborne pathogens Incident Evaluation Form in the **BBP kit on each SET vehicle** must be completed for each incident.
- **All INJURIES** shall be immediately reported.
- **Training:**
- Training about bloodborne pathogens including recognition and response is performed prior to job duty assignment.

# V. MEDICAL SURVEILLANCE

Because of the extent of the SET medical surveillance program it is provided under separate cover. SET addresses exposure to chemicals including recognized carcinogens, PCB's metals, etc and evaluates exposure. Employees are required to perform an initial pre-employment (baseline) questionnaire and physical including.

Bloodwork and screening pertinent to previous exposures
Double sided chest X-Ray or EKG
Pulmonary Function testing
Vision Screening
Chem 20 urinalysis
Urinalysis screening.
Audio Testing
Blood Pressure Monitoring

Employees are required to annually repeat the physical and questionnaire. Portions of, or all of the physical may be repeated whenever exposure to an OSHA 1910 regulated substance has been exceeded. Employees not meeting the OSHA criteria for any portion of the physical are removed from sources or jobs of possible exposure. SET documents all medical surveillance including follow-up, and assessments of hygienic practices of individuals exceeding regulatory requirements.

# VI. SET GENERAL HEALTH AND SAFEY GUIDELINES.

1. Eating, drinking, chewing gum or tobacco, taking medication, and smoking is prohibited in the contaminated or potentially contaminated areas or where any possibility of the transfer of contamination exists
2. As soon as possible after the field decontamination procedures are completed, thorough shower and washing of the body must be performed in the decon trailer.
3. Where possible avoid contact with potentially contaminated substances. Do not walk through puddles, pools, mud, etc. and, whenever possible avoid kneeling on the ground, sitting on drums, equipment, or on the ground. Do not place any monitoring equipment on potentially contaminated surfaces (i.e.: drum, ground, etc.)
4. Become familiar with and knowledgeable about standard operating safety procedures.
5. Be aware of and follow all instructions in the site safety plan. Know how to call for and get emergency medical assistance.

6. Consider fatigue, heat and cold stress, and other environmental factors affecting the efficiency of personnel and plan the work schedule and work load accordingly

7. Inspect all respiratory protection devices and clothing prior to mobilization. Make sure gear has been properly cleaned and maintained since its last use. Replace all worn materials that might malfunction or become compromised under normal working conditions.
8. For emergency situations, oral, and or flag safety signals must be established by the work team. These should be developed, reviewed, and practiced for all phases of operations before going on site.
9. Use the “buddy” system to watch for conditions or problems another worker might encounter. Pre-arrange hand signals when respiratory protection or distance make communication difficult.
10. Maintain visual contact between workers on-site and the crew members. Have certain personnel remain in close proximity in order to assist each other in case of emergencies.

**Proper Clothing:**

1. Never wear loose or ragged clothing, including gauntlet-type gloves, near moving machinery. Overalls shall be tucked into boots or bound at the ankles.
2. Never wear rings, watches or other jewelry when working near moving machinery.
3. Wear gloves when handling drums, cable, rods, or any sharp or splintery material . Wear gloves when working with cement grout, and strong or unknown chemicals.
4. Wear a hard hat and safety glasses at all times
5. Always wear a safety belt or harness when working on a derrick.

**Use of Tools:**

1. Keep all tools clean and in good condition. Store them in an orderly manner when not being used, and repair or replace as necessary.
2. Never leave tools where they may possibly fall on another worker.
3. Never carry tools up or down a ladder by hand; carry them in a belt or bag. Be sure ladder rungs are free of dirt, ice, mud, or lubricants.
4. When using pressure washers, maintain a safe working distance from others and never chop directly towards your feet or legs.

**Lifting Heavy Objects**

1. Never try to lift more than you can comfortably handle. Perform team lifting. Whenever possible mechanize all lifts.
2. When lifting anything, keep your back as straight as possible, do not try to lift with an arched back. Stand squarely, and after making sure your footing is solid, take a firm grip on the object and lift it slowly, exerting pressure on your legs, not your back.
3. When lowering a heavy object to the ground, reverse the lifting procedure keeping your back straight and bending your legs while lowering the object. When you must change direction, hold the object firmly in the same position and then turn your entire body by shifting your feet.

**Safe Driving of Heavy Equipment:**

1. Inspect the vehicle before leaving the warehouse or job site.
2. Assure that all materials and tools are well secured on the vehicle; not blocking rear vision or obstructing signal lights. Do not let equipment overhang. If equipment must overhang use precautionary measures.
3. Maneuver ramps, curves and unusual topography at slow, safe speeds. Approach with caution.
4. Watch for overhead obstructions, utility lines, trees and overpasses. Know your over the road height.
5. Inspect the steering and braking characteristics of the equipment when you have just left an off road condition. Assure that they are functioning properly.
6. Allow a safe stopping distance when following other vehicles.
7. Listen for unusual road noises. Stop and check if something sounds peculiar.
8. When towing trailers, inspect the hitch making sure safety chains and hooks and secure and all lights are operating properly.
9. If the trailer is equipped with brakes, make sure connections are secure.
10. Check wheel lugs when preparing for long distance travel and frequently during routine work.
11. Avoid leaving the vehicle with the motor running. Set the parking break.

**Moving Equipment on Job Site:**

1. Always be alert for falling trees or possible landslides
2. Use only the proper cable or rope to move heavy machines.
3. When moving a machine up a steep grade, anchor all lines. If the machine starts to tip, keep on the high side and try to hold it with a pole or hand spike attached to the frame.
4. Never leave a machine idling when it is on an incline or on loose material; the vibration may put the machine in motion.
5. Always be sure all bystanders are clear of equipment before starting or moving it. Never “hitch” a ride on equipment, and never jump on or off machines while in motion.
6. Never try to move any equipment or vehicles under power unless you are completely familiar with all controls, brakes and safety devices. Always test the brakes before you operate any piece of equipment.
7. Never wrap a rope or hand lines around your wrists, legs or body while guiding or controlling moving equipment or loads. Use only your hands to hold the rope. Obtain assistance if needed.

**Fire:**

1. Know and respect common fire hazards: live matches smoldering cigarette butts, sparks from an open fire.
2. Be sure the exhaust of all machines is directed away from flammable materials and other fire hazards.
3. Smoking will be allowed in designated areas only
4. Use only safe, approved methods for heating work areas.

5. Store combustible scraps and debris in closed containers. Remove these containers from the job site on a regular basis.
6. Never check a battery with a match.
7. Know the location of fire extinguishers and how to use them.

**Cleanliness in the Work Area**

1. Keep platforms and working areas free of ice, mud, spilled lubricants, and excess tools and equipment.
2. Keep engines free of dirt, excessive grease and oil, and spilled fuel.
3. Keep equipment not being used free from dirt and stacked in an orderly manner. Stored equipment or machinery should be blocked or chocked to prevent tilting or rolling.
4. Remove all timber and debris from the work site. Remove all useless nails from timbers, platforms, and derricks.
5. Use waste containers to dispose of all waste and other trash.
6. Clean all work areas at the end of each shift.

**Proper Handling of Fuels**

1. Never use gasoline to start a fire.
2. Do not wash clothing or rags in gasoline
3. Gasoline should be handled and transported in an approved and properly marked container. It should never be stored inside a closed building
4. Never refuel an engine while it is running or while it is hot
5. Always use a funnel when refueling from a can to prevent spilling
6. Never use a fire for thawing lines or heating engines before starting
7. Do not pump fuel into a drill hole to loosen greasy areas.
8. Always use an electric light or flashlight when handling fuels in poor to no light. Never a match or open flame
9. Never smoke in the vicinity of fuels
10. Repair all fuel lines as soon as a leak is discovered or they exhibit signs of deterioration
11. Check fuel containers frequently for water accumulation
12. Check permanent liquids in the cooling system frequently for freezing, contamination, and leaks. Leaking antifreeze is a fire hazard

**Air Pressure Equipment**

1. Use safety clips when attaching any device or hoses
2. Visually inspect all hoses prior to use. Discard any damaged or non functional hoses.
3. Relieve or bleed all lines prior to disconnecting.
4. Always operate within the recommended PSI range.
5. Air pressure is only to be used for the intended purpose. It is not to be used for blowing dust or cleaning clothes.

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# SAFETY BRIEFING

The following personnel were present at the pre-job safety briefing conducted at (time)_____ at (location)_____, and having read the Health and Safety Plan, are familiar with its provisions, and will abide by the procedures set forth in this plan:

| NAME | COMPANY | SIGNATURE |
|---|---|---|
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_____

Printed name of Site Supervisor or Project Manager

_____

Client Representative Date

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## CONTAINER INFORMATION LOG

**DATE____/____/____**

**GENERATOR**_____
**ADDRESS:** _____
_____
_____
**CONTACT:** _____
**Phone:** _____

| Container Unique # | Size | Type | Contents, Manufacturer | Est. Weight | Notes, Integrity, Overpack?, additional information |
|---|---|---|---|---|---|
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**Excavation/Trenching Permit**

**Project Name:** _____
**Location:**

Site Specific Health & Safety Plan
City of Elgin - Salvage Jefferson Yard
Drums, Bulk Sacks, Cylinders – Survey, Sampling, Staging, & Spill Containment
Elgin, IL 60120

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**Project #**
**Competent Person:**
**Date:**
**Expires:**
**Site Activities:**

| SOIL TYPE (Circle one) | | |
|---|---|---|
| | **Stable Rock** | A natural solid mineral that can be excavated with vertical sides and remain intact while exposed. It is usually identified by a rock name such as granite or sandstone. Determining whether a deposit is of this type may be difficult unless known |
| | **A** | Cohesive soils with an unconfirmed compressive strength of 1.5 tons per square foot (tsf) (144kPa) or greater. Examples of Type A cohesive soils are often clay, silty clay, sandy clay, clay loam, and in some cases, silty clay loam and sandy clay loam. (No soil is Type A if it is fissured, is subject to vibration , has previously been disturbed, is part of a sloped, layered system or has seeping water. |
| | **B** | Cohesive soils with an unconfined compressive strength greater than 0.5 tsf (48 kPa) or less than 1.5 tsf (144 kPa). Examples of other type B soils are angular gravel , silt, silt loam, previously disturbed soils unless otherwise classified as type C; soils that meet the unconfined compressive strength or cementation requirements of Type A soils but are fissured or subject to vibration; dry unstable rock; and layered systems sloping into a trench at the slope less than 4H:1V - only if the material is classified as Type B soil |
| | **C** | Cohesive soils with an unconfined compressive strength of 0.5 tsf (48kPa) or less. Other type C soils include granular soils such as gravel, sand and loamy sand, submerged soil, soil from which water is freely seeping, and submerged rock that is not stable into the excavation or have a slope of 4H:1V or greater |
| | **Layered Geological Strata** | Where soils are configured in layers, ie. Where a layered geological structure exists, the soil must be classified on the basis of the soil classification of the weakest soil layer. Each layer may be classified on the basis of the soil classification of the weakest soil layer |

**Shoring Types:**

**Shielding Types:**

**Accepted By:**

**Additional Notes**

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# TANK CLEANING CERTIFICATE

On the _____ day of _____, 20__, the following tank(s)

were emptied and their contents cleaned at the following site:

_____

_____

_____

**owner:**_____

| Quantity | Size (gallons) | Description |
|---|---|---|
| | | |
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**SET Environmental Inc.** hereby certifies that upon completion of this cleaning, the tank(s) described above are empty container(s) in accordance with EPA 40 CFR 261.7 (b) (3)

_____ _____

Signature Date

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# DAILY AIR MONITORING EQUIPMENT CALIBRATION LOG FOR:
## Personal Monitoring Pumps
## PID Meters
## Tri gas Meters

**DATE:_____/_____/_____**

**ANALYST_____**

| Personal Monitoring Pump(s) Unit Type & Number | Span gas used | Actual Reading (lpm) from rotometer ambient air | STD | Calibrated to | Actual Final Reading upon work completion (lpm) |
|---|---|---|---|---|---|
| | XXXX | | 2.0 lpm | | |
| | XXXX | | 2.0 lpm | | |
| | XXXX | | 2.0 lpm | | |
| | XXXX | | 2.0 lpm | | |
| | XXXX | | 2.0 lpm | | |
| | XXXX | | 2.0 lpm | | |
| | XXXX | | 2.0 lpm | | |
| **PID Unit Type(s) & Number** | **Span gas used** | **Actual Reading ppm @ ambient air** | **STD** | **Calibrated to** | **Actual Final Reading (ppm)** |
| | 100 ppm Isobutylene | | 100 ppm | 100 ppm | |
| | 100 ppm Isobutylene | | 100 ppm | 100 ppm | |
| **Tri Gas Meters Unit Type & Number** | **Span gas used** | **Actual Reading ppm @ ambient air** | **STD** | **Calibrated to** | **Actual Final Reading (ppm)** |
| | 250 ppm CO | | 250 ppm CO | | |
| | 40 ppm H2S | | 40 ppm H2S | | |
| | 21.5 % O2 | | 21.5 % O2 | | |
| | 50 % LEL | | 50 % LEL | | |
| | 250 ppm CO | | 250 ppm CO | | |
| | 40 ppm H2S | | 40 ppm H2S | | |
| | 21.5 % O2 | | 21.5 % O2 | | |
| | 50 % LEL | | 50 % LEL | | |